

REMARKS

Status of the Claims

Claims 27-46, 57-63, 66 and 67 are pending in the present application, Claims 1-26, 47-56, and 63 having been previously canceled, Claims 43, 64 and 65 having been canceled herein, and new Claims 66 and 67 having been added herein. Claims 27 and 39 have been amended to more clearly define the recited subject matter.

Telephone Interview

On December 9, 2008, applicants' attorney (Michael C. King, 44,832) and Examiner Lyle Alexander discussed the Office Action dated November 19, 2008.

One topic of discussion was the rejection of Claims 39-46 as failing to comply with the written description requirement. In this rejection, the Examiner expressed concern that analyzing the particles in the spot *without removing the collection surface from the device* represented new matter. Applicants' attorney noted that FIGURES 26 and 28, and paragraphs 0316 and 0317 of the published application appeared to provide support for that language. The Examiner agreed with this position.

Another topic of discussion was the Examiner's position that the claim language *an analyzer configured to analyze the particles while the particles are retained on the collection surface* could be met by *an analyzer that desorbed a sample from the collection surface to perform the analysis*. Applicants' attorney pointed out that one aspect of the concepts disclosed in the pending application was an air sensor that could be deployed for a relatively long period of time without requiring replacement of consumables. Such an air sensor was achieved by cyclically collecting particles, analyzing the particles while on the collection surface, then cleaning the collection surface and collecting more particles. Applicants' attorney pointed out that the specification disclosed optical detectors (which collected and analyzed light from the particles on the collection surface; see paragraphs 0307-0310, and 0314-0317 of the published application) that can perform their analytical function while the particles are physically retained on the collection surface. The Examiner agreed that such analysis appeared to distinguish over the art, and suggested that if such detectors were specifically recited that the claims could be allowed.

Applicants' attorney would like to thank Examiner Alexander for his time and willingness to discuss the application.

1 Amendment to the Specification

2 Paragraph 0023 of the specification refers to a commonly owned copending application by
3 name but not serial number. The correct serial number and issued patent number have been added to
4 paragraph 0023.

5 Paragraphs 0098 and 0316 of the specification refer to FIGURE 26, which illustrates an
6 embodiment corresponding to the pending claims. In preparing for the above noted Telephone
7 Interview, applicants identified a number of errors in the reference numerals used in the Figure and
8 text (for example, the Figure refers to a sensor using reference numeral 230, while the text refers to
9 the same sensor using reference numeral 2630). Appropriate corrections have been made, and no
10 new matter has been introduced.

11 Claims Rejected Under 35 U.S.C. § 112

12 Claims 39-46 have been rejected as failing to comply with the written description
13 requirement. In this rejection, the Examiner expressed concern that analyzing the particles in the spot
14 *without removing the collection surface from the device* represented new matter. As noted above,
15 support for such language can be found in at least paragraphs 0316 and 0317, discussing
16 FIGURES 26 and 28.

17 Based on the disclosure provided in the above noted portions of the specification and Figures,
18 the artisan of ordinary skill would logically have recognized that in at least the embodiment of
19 FIGURES 26 and 28, the spot was analyzed while the particles remained on the collection surface.
20 FIGURE 26 in particular illustrates a transparent collection surface, with a light source on one side
21 and a light detector on the other, to analyze particles disposed between the light source and the
22 detector. Accordingly, the rejection under 35 U.S.C. § 112 should be withdrawn.

23 Claims Rejected Under 35 U.S.C. § 102(b)

24 Claims 27, 28, 32, 33, 35-40, 42, and 45-56 have been rejected under 35 U.S.C. § 102(b) as
25 being anticipated by U.S. Patent No. 5,859,375 (Danylewych-May et al. - hereinafter referred to as
26 "Danylewych-May").

27 In responding to applicants' earlier traversal, the Examiner specifically noted that an analyzer
28 that desorbed particles from the collection surface for analysis would read on the element of *an*
29 *analyzer configured to analyze the particles while the particles are retained on the collection surface*.

1 In the above noted Telephone Interview, applicants' attorney pointed out that the specification
2 disclosed optical detectors (which collected and analyzed light from the particles on the collection
3 surface; see paragraphs 0307-0310, and 0314-0317 of the published application) that can perform
4 their analytical function while the particles are physically retained on the collection surface. The
5 Examiner agreed that such analysis appeared to distinguish over *an analyzer that desorbs particles*
6 *from the collection surface for analysis*, and suggested that if such detectors were specifically recited
7 that the claims could be allowed.

8 Independent Claims 27 and 39 have been so amended (reciting *an analyzer comprising an*
9 *optical detector that can analyze the particles as they remain on the collection surface*), and
10 distinguishes over the art because Danylewych-May employs *an analyzer that desorbs particles from*
11 *the collection surface for analysis*, not an optical detector that can analyze the particles while they
12 remain on the collection surface.

13 Accordingly, the rejection of independent Claims 27 and 39 under 35 U.S.C. § 102(b) should
14 be withdrawn.

15 Since dependent claims inherently include all of the recitation of the independent claims from
16 which they ultimately depend, for at least the same reasons as noted above in connection with
17 independent Claim 27, the rejection of dependent Claims 28, 32, 33, 35-38, 40, 42, and 45-56 should
18 also be withdrawn.

19 Claims Rejected Under 35 U.S.C. § 103(a) over Danylewych-May

20 Claims 29-31, 41, and 58 have been rejected under 35 U.S.C. § 103(a) as being unpatentable
21 over Danylewych-May.

22 Claims 29-31 are dependent upon Claim 27, whose patentability over Danylewych-May has
23 been discussed in detail above. Claims 29-31 are patentable for at least the same reasons.

24 Claim 41 is dependent upon Claim 39, whose patentability over Danylewych-May has been
25 discussed in detail above. Claim 41 is patentable for at least the same reasons.

26 The rejection of Claim 58 appears to be in error, as the Examiner has specifically allowed
27 Claims 57-62.

28 Claims Rejected Under 35 U.S.C. § 103(a) over Danylewych-May in view of Beverly

29 Claim 34 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Danylewych-
30 May in view of U.S. Patent No. 4,742,009 (Beverly et al. - hereinafter referred to as "Beverly").

Claim 34 is dependent upon Claim 27, whose patentability over Danylewych-May has been discussed in detail above. Beverly does not cure the deficiency of Danylewych-May with respect to the optical detector recited in Claim 27, and Claim 34 is patentable for at least the same reasons.

Patentability of New Claim 66

Claim 66 corresponds to rewriting Claim 43, to which the Examiner objected, in independent form. Accordingly, Claim 43 distinguishes over the art.

Patentability of New Claim 67

Claim 67 corresponds to rewriting Claim 38. While the Examiner did not specifically object to Claim 38, the Examiner did specifically note that applicants' prior traversal of the rejection of Claim 38 would be withdrawn (page 7 of the current Office Action). Because no further basis for rejecting Claim 38 was presented, applicants believe that Claim 38 recites patentable subject matter (i.e., the collection surface/homing sensor comprising a plate/lobed shaft combination). Accordingly, Claim 67 distinguishes over the art.

Conclusion

In consideration of the amendment to the claims and the Remarks set forth above, it is applicants' position that all claims in the current application are patentable over the art of record. The Examiner is thus requested to pass this case to issue without further delay. In the event that any other issues remain, the Examiner is invited to telephone applicants' attorney at the number listed below.

Respectfully submitted,

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